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optical resonator according to curvature of wavefront of an incident laser beam,
which comprises locking means for locking the bending mechanism in an
adjusted position, wherein the locking means and the bending mechanism are
separate structures. --

REMARKS

In the foregoing amendments, the claim 1 was amended to better define the invention. Attached hereto is a marked-up version of the changes made to claim 1 by the current amendment. The attached pages are captioned

“VERSION WITH MARKINGS TO SHOW CHANGES MADE.”

The outstanding Office action alluded to the fact that the bending mechanism and locking mechanism of applicant's claims are not two separate structures. This will be explained in more detail below. While it is believed that previously presented claim 1 defined that the bending mechanism and the locking means are separate structures, claim 1 was amended above to positively define this separate structure. Since the position as set forth in the outstanding Office action was not previously raised during the prosecution of this application, and since previously presented claims 1 and 2 defined separate locking means and adjustment means (bending mechanism), applicant respectfully requests that the foregoing amendments be entered under the provisions of 37 C.F.R. § 1.116(b) for the purposes of placing the application in condition for allowance or for the purposes of appeal.

In the outstanding Office action, claims 1 and 2 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,970,082 of Ershov. The Official action stated that the bending mechanism 40 as shown in Fig. 7 of Ershov adjusts the deformation of the grating element 38. The Official action continued that after cessation of turning of the rotating head 85 to adjust the grating element, the remaining tension in the spring 88 will lock the bending mechanism 40 into a fixed position.

Applicant respectfully submits that the teachings of Ershov do not disclose or suggest the invention as set forth in the present claims within the meaning of 35 U.S.C. § 102(b) or 35 U.S.C. § 103(a).

Applicant respectfully disagrees with the positions set forth in the outstanding Office action. While the Official action alleged that the bending mechanism 40 as shown in Fig. 7 of Ershov adjust and locks the deformation of the grating surface 38, applicant respectfully submits that the device as shown in Fig. 7 of Ershov is not a locking mechanism. Please refer to Fig. 7 of Ershov. It is well understood by those skilled in the art that over time the spring 88 will act upon the push bolt 84 and change the adjustment of the deformation of the grating surface. Accordingly, the teachings of Ershov do not contemplate or suggest a locking mechanism or means, as required in the present claims.

Applicant's claims 1 and 2 define separate adjusting means and locking means. For example, previously presented claim 1 required locking means for

locking the bending mechanism. Claim 1 as amended above specifically defines that the locking means and the bending mechanism are separate structures. Claim 2 specifically requires separate adjusted means and locking means. The use of separate locking means and adjustment means enables the presently claimed invention to more precisely adjust the bending mechanism, because it is not also necessary for the adjustment mechanism to tightly hold the elements in place. The tight holding of the elements makes it difficult to finely adjust the arrangement of the elements, because a large amount of force is necessary to overcome the inertia of tightly held elements. The use of a large amount of force when adjusting the elements makes it easy to overshoot a desired adjustment. The bending mechanism or adjustment means of applicant's claimed invention enables an easy adjustment by smooth operation without the need for additional force that would be necessary, if the bending means or adjustment means also had to lock the elements in place.

By providing a separate locking means, applicant's claimed invention positively secures and locks the bending mechanism in place at a position of a grating that modifies the curvature of the wavefront of an instant laser to an adjusted position. Since the structure in Ershov must also permit adjustment, it cannot tightly hold the elements in place. Namely, some leeway or tolerance of adjustment must always be available in the structure of Ershov, because this same structure is used to adjust the elements. On the other hand, since the locking mechanism of applicant's claimed invention is only used to lock the

elements in place, it can more tightly hold the elements in place, because it is never necessary to move the elements once they are locked in place. The teachings of Ershov simply do not contemplate or suggest the structure and resulting advantages of the presently claimed invention. Therefore, applicant respectfully requests that the examiner reconsider and withdraw the rejection of claims 1 and 2 over these teachings.

In view of the foregoing amendment and remarks, favorable consideration and allowance of claims 1 and 2 are respectfully requested. While it is believed that the present application is in condition for allowance, should the Examiner have any comments or questions, it is respectfully requested that the undersigned be telephoned at the below-listed number to resolve any outstanding issues.

In the event any additional fees are due, please charge our Deposit Account No. 22-0256.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 1 was amended as follows:

-- 1. (Amended) An apparatus for locking a bending mechanisms that bends a reflex type wavelength selection element constituting a part of an optical resonator according to curvature of wavefront of an incident laser beam, which comprises locking means for locking the bending mechanism in an adjusted position, wherein the locking means and the bending mechanism are separate structures. --